

Fighting the Impostor Syndrome,  
picking your army, Pareto  
Optimization and other ways to  
survive grad school

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**“BUT I AM VERY POORLY TODAY AND FEEL VERY STUPID AND HATE EVERYBODY AND EVERYTHING. ONE LIVES ONLY TO MAKE BLUNDERS”**

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**CHARLES DARWIN TO CHARLES LYELL IN 1861,  
ONE YEAR AFTER ON THE ORIGIN OF SPECIES**

I am assailed with my own ignorance and inability. Honesty... For no one else knows my lack of ability the way I do. I am pushing against it all the time. Sometimes, I seem to do a good little piece of work, but when it is done it slides into mediocrity...

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John Steinbeck, June 18 1938 while writing *The Grapes of Wrath*



## Unmasking the impostor

# The Impostor Syndrome

- \* A condition where people are unable to internalize their own success
- \* Often feel that they have succeeded because of luck, timing, or other external forces
- \* Comes with feelings that everyone else is smarter and that they do not belong where they are

Lauren Sakowski @LaSaks87 2m  
2 minutes ago  
receiving one of those "only one awarded a year" fellowships

When I read the notification letter, I thought "this is the friendliest rejection ever!"

Katie Hinde @Mammals\_Suck 13s  
14 seconds ago

. #WeekOne @ Community College, after transferring to 4-year, & of grad school- each time totes ended up sobbing I couldn't cut it

most especially when teaching a class for the first time. I took my lumps teaching a first year seminar 1/2

course was fully discussion based and class discussions were like pulling teeth sometime. Worried I didn't know how to teach 2/2

I basically feel like my career is always about to end because I won't get a job since I won't get lucky AGAIN

## When do you feel the Impostor Syndrome

when I leave early to get Boo, when experiment utterly fails, watching student peers give talks w/ way more data

Outlier By Degrees @OutlierByDegree 36s  
37 seconds ago

. I always catch myself thinking...oh wait, I'm the doctor. Yikes.

FitAcademic @FitAcademic 38s  
38 seconds ago

Being asked to review grants from rockstars, or for big journals

Nadia Prigoda-Lee @the\_girl 39s  
40 seconds ago

Any time I've received a compliment.

When I got TT job. So, I refuse to spend every waking second working. Someone out there would be working harder #ImpostorSyndrome

Whenever I leave the protective aura of my very beloved and supportive committee.

oh, also when I read reviewer #2 comments when I was reviewer #1 and saw I missed a ton of stuff. That too.

MissMolaMola @missmolamola 19s  
19 seconds ago

42 seconds ago

I feel it every day i'm in school. it sucks. When I used to care way way too much about what other people thought about me. It never did me any good.

# Underlying causes

- A culture of brilliance
- Appearance of a meritocracy founded on infallible success
- For people who are from underrepresented groups in science the tacit (or explicit) belief that they are there only b/c of “what box they checked off”

# How does the Impostor Syndrome impact you?

- Can manifest itself either aggressively or passively
- Lower grades - lack of participation
- Students do not go after awards, grants etc.

Hope Jahren @HopeJahren 19s

20 seconds ago

It has made me terminally distrustful both of people who tell me my stuff is crap and of people who tell me my stuff is great.

Lauren Sakowski @LaSaks87 8s

8 seconds ago

I still hesitate to stand up for myself in a scientific argument because obviously I'm wrong.

stress of impending failure and doom b/c I can't cut it (even though I totally can)

da Carson @lccarson 22s

seconds ago

Imposter Syndrome makes me feel small + dulls my "step up" reflexes: I'm slow to realize I am Someone Who Can Decide/Fix Things

Johnna Roose @JLRoose 52s

52 seconds ago

Responding to reviewers' comments. Demoralizing until you realize they don't quite know what they are talking about.

## How has it impacted you?

Mark O. Martin @markowenmartin 29s

29 seconds ago

It has crippled my professional life from Day One. #muchtherapy

It's impacted me many ways bc i don't apply for student research positions, scholarships, jobs...

Nick Caruso @PlethodoNick 2m

2 minutes ago

never want to ask questions at seminars

SJ Elliott @Prof\_SJE 1m

1 minute ago

It's made me hesitant to pursue things that I should go for, & very reluctant to insist that I be treated as well as others are.

Sarah Tuttle @niais 34s

34 seconds ago

I always assume it is me, getting it wrong.

Outlier By Degrees @OutlierByDegree 20s

21 seconds ago

Bad - I worry that I'm not up to the task when asked to do things. Too much stress for even small tasks. 2/2 #impostersyndrome

Yai Aou @YaiAou 25s

26 seconds ago

Makes me be unsure of trying to pursue a career in science bc 'it's not for me'.

Psyc Girl @PsycGrrrl 2m2 minutes ago

I have held myself back and sabotaged myself

albatrossphd @albatrossphd 33s

34 seconds ago

kept me from going for many big time jobs, grants, pubs, etc.

KatMM @Napaaqtuk 54s

54 seconds ago

: It keeps me from talking science to labmates, and from asking questions in seminars. #impostersyndrome

Terry McGlynn @hormiga 1m

1 minute ago

I'm not sure others would think my opinion on this is worth sharing

Yai Aou @YaiAou 28s

28 seconds ago

I keep thinking "why am i even trying?", paralyzes me, makes me fail even more, doubt even more and so on.

when things go wrong in lab (particularly for students). I've done it before but now not working. Before was probably a fluke.

Stewart Barker @Stewart\_Barker 31s

32 seconds ago

makes me devalue myself and my work, and affects my confidence, which can actually affect my work = feedback loop

Summer Ash @Summer\_Ash 49s

49 seconds ago

hey FYI, I just congratulated a grad student on her Nature paper and she said "I didn't really do anything" 1/2

Summer Ash @Summer\_Ash 43s

44 seconds ago

so I said "DON'T SAY THAT" - say thank you cuz you clearly make a valuable contribution.

Timothy Bonebrake @bonebraking @Mammals\_Suck  
like I needed to defend myself and why I went to CC.

Yes! Transferring from CC to 4-yr was tough. Constantly feeling

I remember talking to a patriarch (cousin's grandfather) who said of my cousin "yes, that's nice that he got his degree from Cambridge, in mathematics, but he was not the first in his class. Until he is the first in his class, I am not satisfied."

That still makes me want to knife the old man (god rest his soul). So I think there are certain cultural norms that would in some way limit your ability to express the sense of your own success, which might make one more prone to this syndrome.

- Professor of Economics of Sri Lankan descent

Caitlin Rivers @cmyeaton 22s

22 seconds ago

vicious feedback loop. it's assumed you don't know what you're talking about, so you become less assertive, repeat.

Sarah Tuttle @niais 6s

6 seconds ago

"are you just a jerk, or are you a misogynist?" Hard to separate competing effects...

Yai Aou @YaiAou 12s

13 seconds ago

Also, not talking because IS + men talking 'louder' in scientific arguments = perceived 'not smart' (or not perceived smart)

Lauren Sakowski @LaSaks87 7s

7 seconds ago

Particularly difficult when your field is essentially an old boys' club and you're a young female. No one takes you seriously.

## Women and Underrepresented groups

Ashley Pagnotta @ashpags 39s

40 seconds ago

I rarely ask questions at talks/discussions bc the answer is probably something I should already know. Bad for visibility.

Ashley Pagnotta @ashpags 43s

44 seconds ago

@the\_girl Yes, what Nadia said! Compliments are big triggers. Also, during discussions, when others get it faster, ask better Qs.

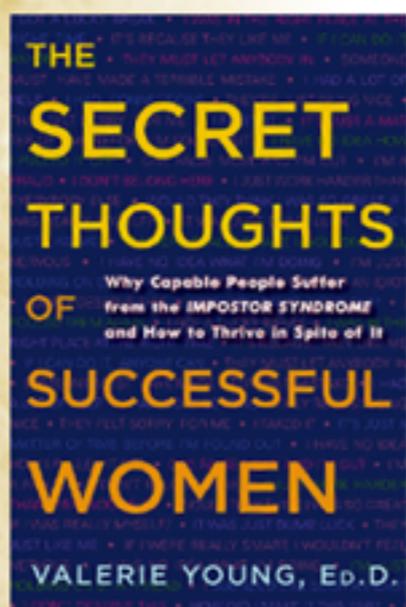
Yai Aou @YaiAou 15s

15 seconds ago

Talked to a female role model who told me "I feel stupid when talking with a group of men." (bc IS), -> less will to continue.

# Overcome the *Impostor Syndrome*

Dr. Valerie Young



Crown Business,  
a division of  
Random House

**Buy the Experience**

## Make a Difference in Your Life, Community and the World

- Learn about upcoming online classes, webinars, and live workshops
- Learn more about how you can “share the confidence” with other girls and women locally and around the world

# What you can do?

- Identify that we all feel this way
- Do not rely on exogenous validation
- Support others when you know they are down
  - Importance of having a community
- Chronicle your successes

I alleviate #ImpostorSyndrome by reflecting on the mythology of "genius" in academia. People worked v hard to get where they are.

Megsie @margaretsiple 22s

22 seconds ago

That said, let us be clear that academia is not 100% a meritocracy (it helps to think about that too!)

Chris Anderson @c\_n\_anderson 30s

30 seconds ago

um...this? Chatting with colleagues. This gig can be very isolating sometimes, so community ma

Johnna Roose @JLRoose 20s

21 seconds ago

Just keep science-ing on with catchy new songs in my playlist. And a visit to the LSU Dairy Store for a scoop.

Linda Carson @lccarson 33s

33 seconds ago

Coping with Imposter Syndrome: 1. Buddy system 2. "Brag Wall" to keep some accomplishments top of mind 3. Therapist. Seriously.

## How do we deal with it

Mark O. Martin @markowenmartin 34s

34 seconds ago

I have received far more support and help from scientists via social media than anywhere else. Thank you all.

Nadia Prigoda-Lee @the\_girl 18s

19 seconds ago

Knowing is half the battle. I know IS exists, so I ask myself if I'm feeling insecure for real reasons.

Lauren Sakowski @LaSaks87 39s

39 seconds ago

a combination of a solid support system and reminders to myself that what I know is great; what I don't, I'll learn

Holly Kindsvater @HollyKindsvater 3s

4 seconds ago

. I try to cultivate the Beginner's Mind. Children don't have #ImposterSyndrome... Also, I just stopped caring what others think!

Caitlin Rivers @cmyeaton 15s

15 seconds ago

also asking 'whats the worst that can happen?' I embarrass myself, drop out, move to the beach? NBD.

Kate Horowitz @delight\_monger 46s

47 seconds ago

Mindfulness/impermanence, mostly: Recognizing that it's just that asshole Imposter Syndrome again, and that this, too, shall pass

SJ Elliott @Prof\_SJE 21s

22 seconds ago

remind myself of who I want to be if only for the sake of my family and group. And check in with a few more senior colleagues

albatrossphd @albatrossphd 21s

21 seconds ago

I look a picture of a manatee that says 'Don't listen to your jerkbrain, you are smart and pretty' Every. Day. Framed on my desk.

Stewart Barker @Stewart\_Barker 15s

15 seconds ago

I treat imposter syndrome like anxiety. I either face it, or distract myself and ignore it, depending on my mood

Francois Gould @PaleoGould 52s

52 seconds ago

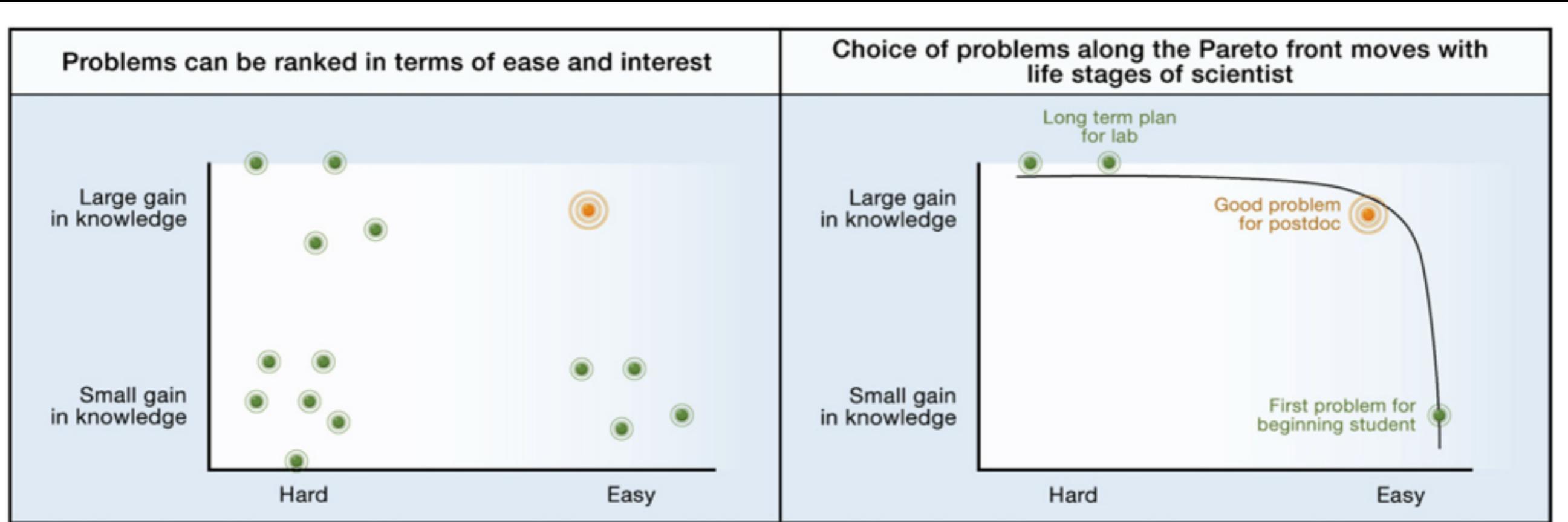
when i was most stressed about grad school, my mother said "a l'impossible, nul n'est tenu". No one is held to do the impossible.

XXXX (Science Journalist) So many thoughts, so little time. I sort of find the impostor feeling liberating in some ways, weirdly. Something like: "well, they're going to find out that I'm awful at this sooner or later, might as well just do what I want and try new weird things and be wacky!"

13 hours ago ·

XXXX (Assistant Prof) I am SO in line with XXXX on this - When I got to Princeton I was terrified that everyone would realize that I was the stupidest person in the room... for about a week. then I realized two important things- being the stupidest person in the room means you can learn more than anyone else, and that is super liberating. I also learned that my boss - the female chair of the Geosciences department - still feels the same way...recognizing the feeling, that women/people at every level feel this way makes it way easier to beat back the demons

# Set yourself up for success



**Figure 1. The Feasibility-Interest Diagram for Choosing a Project**

Two axes for choosing scientific problems: feasibility and interest.

## How To Choose a Good Scientific Problem

Uri Alon<sup>1,\*</sup>

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\*Correspondence: [urialon@weizmann.ac.il](mailto:urialon@weizmann.ac.il)

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# Take your time

- MA students feel pressure to finish quickly
- However take the time to be thoughtful
  - plan
  - pause
  - proceed
- “If you don’t have time to do it right the first time, you don’t have the time to do it wrong the first time”

# Find your community

- Communicating is the single best way to overcome this
- Find your voice and use it regardless of the medium
- If nervous about admitting this you can do so anonymously through blogging/tweeting etc.

# Appearances are deceiving

- People are often uncomfortable sharing their inner doubts, again communication is really key
- Social media can give false selective impressions both for success and mood



# Advocate for yourself

- Don't use words "just" or "only" when describing your work
- Remember you've gotten good things for a reason
- Don't apologize for yourself
- Seek and give support

Sarah Hörst @PlanetDr 12s  
13 seconds ago  
it'll be ok. No really.

Lauren Sakowski @LaSaks87 26s  
27 seconds ago

The quote I had read for my doctoral hooding, "She believed she could, so she did."

Eva Rose @thankascientist 35s  
36 seconds ago  
@PlanetDr

I second this. It will be OK. Relax. Breathe. Slow down. Forgive yourself.

Sciencegurl @sciencegurlz0 5m  
5 minutes ago  
Breathe. It is all going to be fine.

Lyndell Bade @lyndellmbade 3s  
4 seconds ago  
BE BRAVE!

Craken MacCraic @Craken\_MacCraic 17s  
18 seconds ago

In 5 years time, you'll be advising others who went through the same thing you did now #wibblywobblytimeywhimey

## What would you say to yourself

Holly Kindsvater @HollyKindsvater 3s  
4 seconds ago

I try to cultivate the Beginner's Mind. Children don't have #ImposterSyndrome... Also, I just stopped caring what others think!

Kate Horowitz @delight\_monger 38s  
38 seconds ago

Darling, relax. This life is short, magnificent, and absurd. You may as well enjoy it.

Sarah Hörst @PlanetDr 6s  
6 seconds ago

I realized 1 day that 5 yrs ago me would be so impressed by today me and ask how I "got here". Even tho today me feels inadequate

MissMolaMola @missmolamola 47s  
48 seconds ago

"look at the path your life has taken! you're driving boats, planning interpretive programs at a museum...what can't you do?"

Tannis McCartney @TMMCC 1m  
1 minute ago

"Boldly Go." That, and "build the support network you need."

ate Hertweck @k8hert 42s  
2 seconds ago

I wish I'd learned earlier to empathize with other folks and model supportive behavior to combat I.S. (<http://k8hert.blogspot.com/2014/07/the-value-of-few-kind-words-in-academia.html> ...)

My T Chondria @MyTChondria 24s

25 seconds ago

You've done great. If you don't move to someone else's version of the next level, you need different goals.

Linda Carson @lccarson 7s

8 seconds ago

From an unattributed sign over my desk: "Stop looking for bananas from people who have no bananas to give you."

Rebecca L.Cunningham @Becca\_MO\_TX 29s

30 seconds ago

get everything in writing. Enjoy the quiet moments and not worry about what you should be doing

Yai Aou @YaiAou 27s

28 seconds ago

So: "Hey, spending 16h/day at the lab bc you think you are less efficient than others is NOT a solution."

Andrea Wishart @pickleswarlz 1m

1 minute ago

Imposter syndrome silences self worth, so don't be flattered into something that isn't in the best interest of YOU.

Yai Aou @YaiAou 2m

2 minutes ago

At the end of my PhD, my grandpa had recently died, & my grandma wrote me in a letter: "life is too short to let work damage you"

Michelle Gumz @MLGumz 12s

12 seconds ago

"stop eating the free cookies /bagels/etc. at seminars, you're metabolism is only getting slower"

My T Chondria @MyTChondria 10s

10 seconds ago

I've actually not experienced imposter syndrome having learned when I was ~ 9, everything is temporary. Contd...

My T Chondria @MyTChondria 55s

56 seconds ago

I had so many people die out of nowhere and picking up the pieces and helping is my job. Everything else is icing.